

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/014113

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C07D213/64 C07D405/12 C07D213/70 C07D213/74 C07D413/04 C07D417/04 C07D401/04 C07D213/61 C07D213/50 C07D405/04 C07D405/06 C07D213/84 C07D413/14 C07D213/79 A01N43/40					
According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 C07D A01N					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, CHEM ABS Data, PAJ, WPI Data, BEILSTEIN Data					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category *	Citation of document, with indication, where appropriate, of the relevant passages				Relevant to claim No.
P, Y	WO 2004/058712 A (SYNGENTA PARTICIPATIONS AG; BEAUDEGNIES, RENAUD; EDMUNDS, ANDREW; LUET) 15 July 2004 (2004-07-15) see general formula (1) and (Q1a), page 20 and whole document				1-4
X	EP 0 353 187 A (CIBA-GEIGY AG) 31 January 1990 (1990-01-31) cited in the application see general formula, formula I and I' page 4, lines 1-10, formula III page 6				1-4
X	EP 0 316 491 A (STAUFFER AGRICULTURAL CHEMICALS COMPANY, INC) 24 May 1989 (1989-05-24) cited in the application see general formula, page 5 reaction 1), page 7 lines 10-19				1-4
-/-					
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.					
* Special categories of cited documents : *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *8* document member of the same patent family					
Date of the actual completion of the international search			Date of mailing of the international search report		
7 March 2005			17/03/2005		
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax (+31-70) 340-3016			Authorized officer Scruton-Evans, I		

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Y	WO 00/15615 A (NOVARTIS AG; NOVARTIS-ERFINDUNGEN VERWALTUNGSGESELLSCHAFT MBH; EDMUNDS) 23 March 2000 (2000-03-23) cited in the application see whole document, especially definition Q4 for Q and formula II, page 24 and formula XI page 26 and Table 2	1-4
P,X	YONEZAWA, YASUCHIKA ET AL: "Useful synthesis of 2,3,6-tri- and 2,3,5,6-tetrasubstituted pyridine derivatives from aspartic acid" HETEROCYCLES, 63(12), 2735-2746 CODEN: HTCYAM; ISSN: 0385-5414, 2004, XP002320179 see compounds 16 and 17, scheme 2	2
P,X	COTTET, FABRICE ET AL: "Further metalations and functionalizations of chloro-, bromo- and iodo(trifluoromethyl)pyridines" SYNTHESIS, (10), 1619-1624 CODEN: SYNTBF; ISSN: 0039-7881, 2004, XP001205073 see compound 5, apge 1620	2
X	ADAMCZYK M ET AL: "Nonproteinogenic amino acids: an efficient asymmetric synthesis of (S)-(-)-acromelobic acid and (S)-(-)-acromelobinic acid" TETRAHEDRON, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 58, no. 34, August 2002 (2002-08), pages 6951-6963, XP004377348 ISSN: 0040-4020 see compound 29	2
X	MEGGERS, ERIC ET AL: "A Novel Copper-Mediated DNA Base Pair" JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, 122(43), 10714-10715 CODEN: JACSAT; ISSN: 0002-7863, 2000, XP002320180 compound RN316808-11-4, 2,6-pyridinedicarboxylic acid, 3-bromo, dimethylester, see supporting information, page S2, lines 10-12	2
X	EP 0 864 565 A (LONZA AG) 16 September 1998 (1998-09-16) see general formula I and example 8	2
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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X	KELLY, T. ROSS ET AL: "Total Synthesis of Dimethyl Sulfomycinamate" JOURNAL OF ORGANIC CHEMISTRY, 61(14), 4623-4633 CODEN: JOCEAH; ISSN: 0022-3263, 1996, XP002320181 see compounds 41,43,45	2
X	JP 04 243261 A (TOYO INK MFG CO LTD) 31 August 1992 (1992-08-31) see formula VII page 40 and RN147432-89-1, 2-pyridinecarboxylic acid, 5,6 dicyano	2
X	US 4 826 858 A (BOSIES ET AL) 2 May 1989 (1989-05-02) see example 3, column 10, lines 1-2 and example 1, column 9, lines 6-7	2
X	US 4 616 087 A (WOOD ET AL) 7 October 1986 (1986-10-07) see examples 14, 12 (column 8, lines 31-35)	2
X	US 4 594 422 A (ORVIK ET AL) 10 June 1986 (1986-06-10) see column 2, line 40 and example 2	2
X	JP 49 026283 A (BANYU PHARMA CO LTD) 8 March 1974 (1974-03-08) see formula I and page 522 formula	2
X	RATEB, LATIF ET AL: "Reactions of hydroxymethylene ketones. III. Synthesis of 1,2-dihydro-2-oxopyridinepolycarboxylic acids" JOURNAL OF THE CHEMICAL SOCIETY 'SECTION! C: ORGANIC', (17), 2140-4 CODEN: JSOOAX; ISSN: 0022-4952, 1968, XP009044777 see passage bridging column 1 and 2, page 2142 (VIII, R = OH), acid chloride (page 2143), methyl -3-cyano-2-methoxypyridine6-carboxylate (page 2142, column 2),	2

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Information on patent family members

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